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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,284	04/01/2004	Ray O. Chaney	C-00024-001	9507
27386	7590	08/16/2005		
NORRIS, MCLAUGHLIN & MARCUS, P.A. 875 THIRD AVE 18TH FLOOR NEW YORK, NY 10022			EXAMINER ALI, HYDER	
			ART UNIT	PAPER NUMBER
			3747	

DATE MAILED: 08/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/816,284

Applicant(s)

CHANEY, RAY O.

Examiner

HYDER ALI

Art Unit

3747

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4, 6 and 8 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferry (US 1,904,680) in view of Hoogenboom (US 4,974,555).

Ferry discloses a piston-cam engine, which includes; a drive cylinder 15; a drive piston 19 operably disposed within said cylinder 15 having a piston head 20 and a shaft 21; a support frame 2 having a generally cylindrical bearing surface 4; a drive shaft 5 rotatably movably received within said cylindrical bearing surface 4; a cam 11 having a peripheral surface and having a plurality of lobes 12,13 thereon; a roller member 23,31 connected to said piston shaft 21 and adapted for engagement with said peripheral surface of said cam 11; and biasing means 26,27 for biasing said roller member 23,31 continuously against said peripheral surface of said cam 11.

Ferry does not disclose biasing means 26,27 is spring biasing means. However, Hoogenboom discloses spring biasing means 13 to keep rollers 11 on surface 9. It would have been obvious to a person having ordinary skill in the art to modify Ferry by employing spring biasing means as taught by Hoogenboom **in order to** enhanced performance by replacing biasing means with spring biasing means.

As to Claim 2, Ferry discloses a support drive plate 26,27 interconnecting said piston shaft 21 and said roller member 26,27.

2. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al (US 5,836,234) in view of Hoogenboom (US 4,974,555).

Chen et al discloses a piston-cam engine, which includes; a drive cylinder 8; a drive piston 1' operably disposed within said cylinder 8 having a piston head and a shaft 9; a support frame having a generally cylindrical bearing surface; a drive shaft 7 rotatably movably received within said cylindrical bearing surface; a cam 6 having a peripheral surface and having a plurality of lobes thereon; a roller member 3 connected to said piston shaft 9 and adapted for engagement with said peripheral surface of said cam 6; and biasing means 10 for biasing said roller member 3 continuously against said peripheral surface of said cam 6.

Chen et al does not disclose biasing means 10 is spring biasing means. However, Hoogenboom discloses spring biasing means 13 to keep rollers 11 on surface 9. It would have been obvious to a person having ordinary skill in the art to modify Chen et al by employing spring biasing means as taught by Hoogenboom in order to enhanced performance by replacing biasing means with spring biasing means.

As to Claim 2, Chen et al discloses a support drive plate 10 interconnecting said piston shaft 9 and said roller member 3.

As to Claim 3, Chen et al discloses a first slave cylinder adjacent said drive cylinder 8 and has a first slave piston 1" operably disposed in said slave cylinder and

has a piston head and a shaft 9, wherein said first slave piston shaft 9 is connected to said support drive plate 10 to absorb part of a force exerted on said support plate 10 during operation of said engine.

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al (US 5,836,234) in view of Hoogenboom (US 4,974,555).

Chen et al discloses a piston-cam engine, which includes: a drive cylinder 8; a drive piston 1' operably disposed within said cylinder 8 having a piston head and a shaft 9; a support frame having a generally cylindrical bearing surface; a drive shaft 7 rotatably movably received within said cylindrical bearing surface; a cam 6 having a peripheral surface and having a plurality of lobes thereon; a roller member 3 connected to said piston shaft 9 and adapted for engagement with said peripheral surface of said cam 7; a support drive plate 10 interconnecting said piston shaft 9 and said roller member 3; biasing means 10 for biasing said roller member 3 continuously against said peripheral surface of said cam 6; and a first slave cylinder adjacent said drive cylinder 8 and has a first slave piston 1" operably disposed in said slave cylinder and has a piston head and a shaft 9 wherein said first slave piston shaft 9 is connected to said support drive plate 10 to absorb part of a force exerted on said support plate 10 during operation of said engine.

Chen et al does not disclose biasing means 10 is spring biasing means. However, Hoogenboom discloses biasing means 13 to keep rollers 11 on surface 9. It would have been obvious to a person having ordinary skill in the art to modify Chen et al

by employing spring biasing means as taught by Hoogenboom in order to enhanced performance by replacing biasing means with spring biasing means.

4. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferry (US 1,904,680).

Ferry show all the limitations as cited above except, biasing means 26,27 to be spring biasing means. It would have been obvious to a person having ordinary skill in the art to modify Ferry by using spring biasing means in place of biasing means 26,27, because applicant has not disclosed that a spring biasing means would solve specific problem. Further biasing means 26,27 would work the same way as spring biasing means.

5. Claim 1-3 and 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al (US 5,836,234).

Chen et al show all the limitations as cited above except, biasing means 10 to be spring biasing means. It would have been obvious to a person having ordinary skill in the art to modify Chen et al by using spring biasing means in place of biasing means 10, because applicant has not disclosed that a spring biasing means would solve specific problem. Further biasing means 10 would work the same way as spring biasing means.

Allowable Subject Matter

Claims 4,6 and 8 are allowed.

Response to Arguments

Applicant's arguments with respect to claims 1-6 and 8 have been considered but are moot in view of the new ground(s) of rejection. Applicant remarks "spring biasing means is not shown in the cited art" are not considered persuasive because Hoogenboom (US 4,974,555) discloses spring biasing means 13.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HYDER ALI whose telephone number is (571) 272-4836. The examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HENRY YUEN can be reached on (571) 272-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


ha


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